

1       What is claimed is:

- 2       1. An exercise assembly structured to exercise a leg-ankle-  
3           foot portion of a user's body, said exercise assembly  
4           comprising:  
5            a) a platform dimensioned and configured to support a  
6              foot of the user thereon,  
7            b) a base interconnected in supporting relation to said  
8              platform,  
9            c) a support assembly movably interconnected to said  
10             platform in supporting relation to said base,  
11            d) said platform manually driven by force exerted thereon  
12             by the user, and  
13            e) said platform and support assembly cooperatively  
14             structured to direct the platform through a plurality  
15             of paths of movement each having a predetermined range  
16             of motion.
- 17       2. An assembly as recited in claim 1 wherein said support  
18             assembly comprises a substantially semi-circular  
19             configuration having opposite free ends connected to said  
20             platform.
- 21       3. An assembly as recited in claim 2 wherein said semi-  
22             circular configuration of said support member defines a  
23             diameter substantially extending transversely through an  
24             axis of rotation of the user's ankle joint.
- 25       4. An assembly as recited in claim 1 wherein said plurality of

1           paths of movement comprise a plurality of axes of rotation  
2           corresponding at least to the natural axis of rotation of  
3           the ankle, lower leg and knee.

- 4       5. An assembly as recited in claim 1 further comprising a  
5           sensor assembly including a plurality of sensors each  
6           disposed structured to determine a path of movement of said  
7           platform relative to a predetermined axis of rotation.
- 8       6. An assembly as recited in claim 5 further comprising a  
9           processor responsive to data determined by said plurality  
10          of sensors, said processor structured to store said data  
11          and connected to a display facility.
- 12      7. An assembly as recited in claim 6 wherein said display  
13          facility and processor are operative to visually inform the  
14          user of said plurality of paths of movement on a real time  
15          basis.
- 16      8. An assembly as recited in claim 7 wherein a range of motion  
17          of said platform relative to each of said plurality of  
18          paths of travel may be determined and extended beyond a  
19          normal range of motion for a predetermined part of the  
20          user's body.
- 21      9. An assembly as recited in claim 8 wherein said platform may  
22          be directed through a plurality of paths of movement  
23          determined by said stored data, each of said plurality of  
24          paths of movement comprising a different configuration  
25          determinative of which predetermined portion of the user's

1           body is to be exercised.

2       10. An assembly as recited in claim 1 further comprising at  
3           least one weight assembly interconnected to said platform  
4           and disposed laterally outward therefrom.

5       11. An assembly as recited in claim 10 wherein said weight  
6           assembly includes an elongated arm extending laterally  
7           outward from said platform and at least one weight member  
8           secured to said arm substantially adjacent an outer end  
9           thereof.

10     12. An exercise assembly structured to exercise predetermined  
11           portions of a user's body including a leg, ankle, and foot,  
12           said exercise assembly comprising:

13           a) a platform removably attached in supporting engagement  
14                   with a foot of the user,

15           b) a base movably interconnected in supporting relation  
16                   to said platform,

17           c) a support assembly connected to said base and disposed  
18                   to support said platform in a substantially outwardly  
19                   suspended relation to said base,

20           d) a drive assembly connected to said base and  
21                   interconnected in driving relation to said platform,  
22                   and

23           e) said drive assembly, platform and said support  
24                   assembly interconnected and cooperatively structured  
25                   to regulate movement of said platform through a

1                   plurality of paths of movement each having a variable  
2                   range of motion.

3       13. An assembly as recited in claim 12 wherein each of said  
4                   plurality of paths of movement comprises a different  
5                   configuration determinative of which predetermined portion  
6                   of the user's body is exercised.

7       14. An assembly as recited in claim 12 wherein said drive  
8                   assembly comprises a plurality of drive motors each  
9                   interconnected in driving relation to said platform.

10     15. An assembly as recited in claim 14 wherein each of said  
11                  drive motors is disposed and structured to move said  
12                  platform relative to a different predetermined axis of  
13                  rotation.

14     16. An assembly as recited in claim 15 wherein said plurality  
15                  of drive motors are collectively and cooperatively  
16                  structured and disposed to move said platform through a  
17                  substantially universal range of motion.

18     17. An assembly as recited in claim 14 wherein said plurality  
19                  of drive motors are concurrently operative and  
20                  cooperatively structured to direct said platform through a  
21                  substantially universal range of motion.

22     18. An assembly as recited in claim 12 further comprising a  
23                  sensor assembly including at least one sensor disposed and  
24                  structured to determine at least the path of movement of  
25                  said platform, said sensor assembly further including a

- 1           processor responsive to data received from said sensor and  
2           including storage capabilities for storage and retrieval of  
3           the data received from said sensor.
- 4       19. An assembly as recited in claim 18 further comprising a  
5           display facility connected to said processor and structured  
6           to visually display representations of the paths of  
7           movement of said platform on a real time basis.
- 8       20. An assembly as recited in claim 19 wherein said sensor  
9           assembly comprises a plurality of sensors each disposed and  
10          structured to determine a path of movement of said platform  
11          relative to a different, predetermined axis of rotation,  
12          each of said sensors connected to said processor, said  
13          processor responsive to store and retrieve data received  
14          from said plurality of sensors.
- 15      21. An exercise assembly structured to exercise predetermined  
16          portions of a user's body including the leg, ankle, knee  
17          and foot, said exercise assembly comprising:  
18           a) a platform removably attached in supporting engagement  
19              with a foot of the user,  
20           b) a base movably interconnected in supporting relation  
21              to said platform,  
22           c) a support assembly interconnected to said base and  
23              disposed to support said platform in a substantially  
24              outwardly suspended relation to said base, and  
25           d) a sensor assembly operatively interconnected to said

platform and structured to determine the paths of movement and the range of motion of said platform.

22. An assembly as recited in claim 21 further comprising a display facility connected to said processor and structured to visually display representations of the paths of movement of said platform on a real time basis.
  23. An assembly as recited in claim 22 wherein said sensor assembly comprises a plurality of sensors each disposed and structured to determine a path of movement of said platform relative to a different predetermined axis of rotation, each of said sensors connected to said processor, said processor responsive to store and retrieve data received from said plurality of sensors.